資訊時代編目員面臨的衝擊

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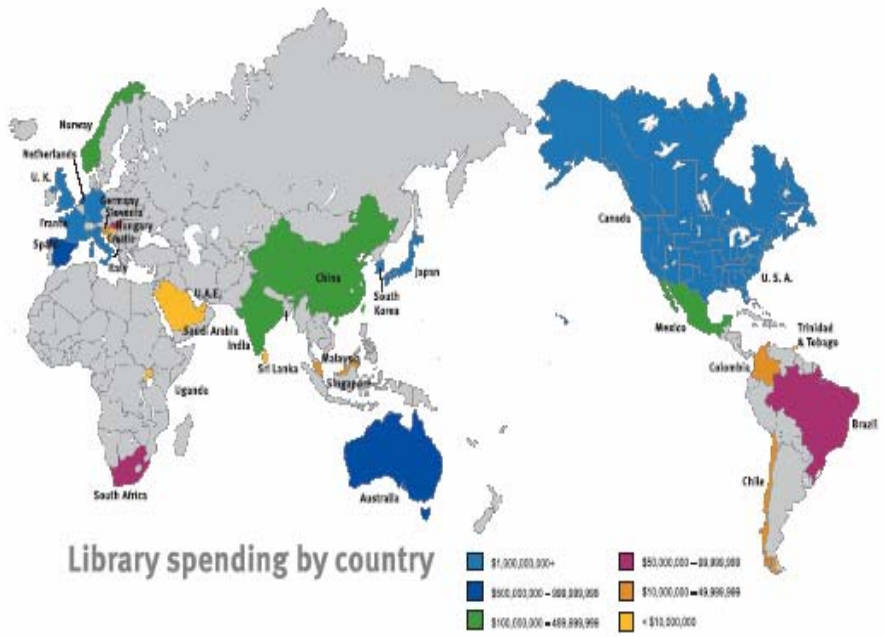
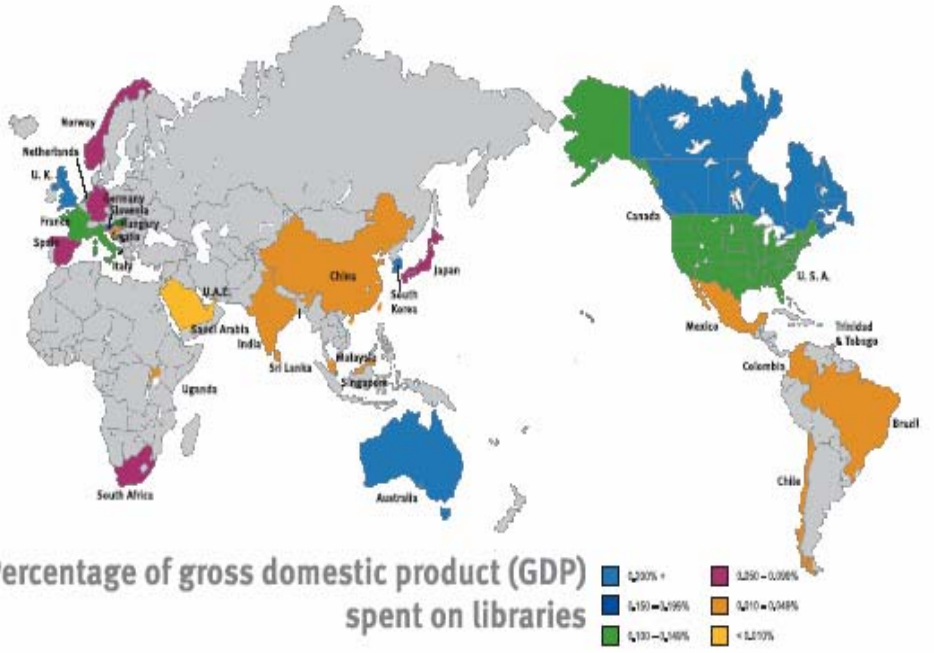
國立臺灣師範大學圖書資訊學研究所
2004/7/12





Percentage of gross domestic product (GDP) spent on libraries

Country library spending

Country	Library Spending (Millions)	% GDP on Libraries	Country	Library Spending (Millions)	%GDP on Libraries	Country	Library Spending (Millions)	% GDP on Libraries
United States	$ 11,951	0.11%	Spain	$ 531	0.08%	Malaysia	$ 28	0.03%
Japan	$ 3,247	0.08%	China	$ 218	0.02%	Colombia	$ 16	0.02%
United Kingdom	$ 3,221	0.21%	Norway	$ 179	0.09%	Chile	$ 13	0.02%
Italy	$ 1,599	0.14%	Mexico	$ 104	0.02%	Croatia	$ 8	0.04%
France	$ 1,591	0.11%	India	$ 103	0.02%	Saudi Arabia	$ 7	0.00%
South Korea	$ 1,507	0.32%	Brazil	$ 90	0.02%	Sri Lanka	$ 3	0.02%
Canada	$ 1,447	0.20%	Singapore	$ 70	0.08%	Trinidad & Tobago	$ 3	0.03%
Germany	$ 1,353	0.07%	South Africa	$ 68	0.06%	U.A.E.	$ 3	0.00%
Australia	$ 834	0.20%	Hungary	$ 64	0.10%	Uganda	$ 1	0.01%
Netherlands	$ 536	0.13%	Slovenia	$ 35	0.17%			

Source: Various including LibEcon, UNESCO, *World Encyclopedia of Library and Information Services* and estimates for certain countries.

一些新的編目實例

- FRBR 的實際應用： IU　Digital Music Library
- Metadata的串連及視覺化呈現
- 知識分類體系：分類表、索引典及 topic maps

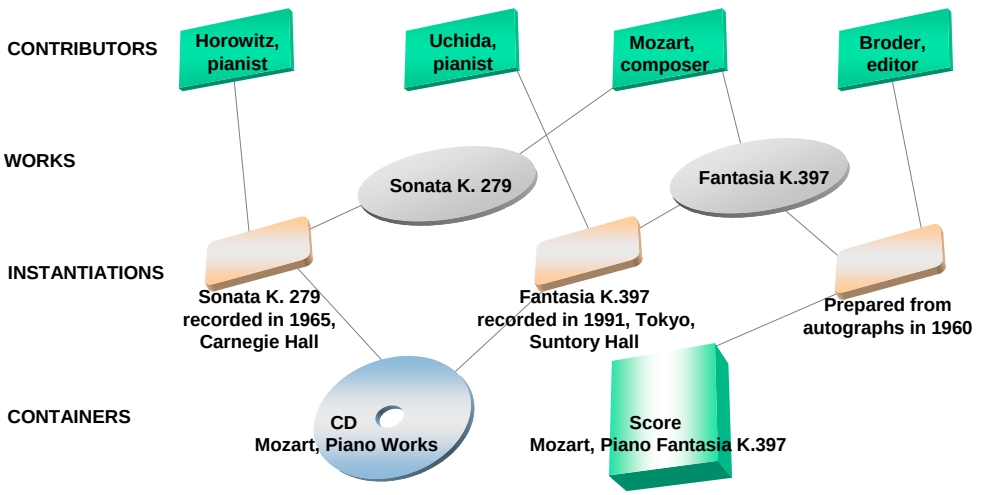
Variations 1

- Variations
  - Production DL of sound recordings (~8000 titles) and scores (~200 titles) in IU Cook Music Library
  - Used for course reserves and general collection access
- Variations = production service
- Variations2 = R&D system

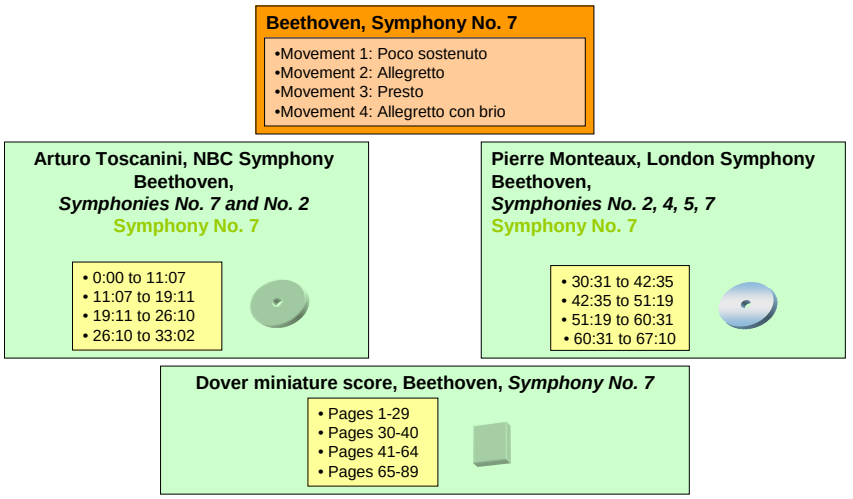
Variations2 system

- Integrated access to music in all formats
  - Digital audio recordings
  - Score images
  - Score notation
  - Video
- Delivery to wide range of users
  - Faculty: teaching, course design, research
  - Students: coursework, independent study
  - Music librarians, other library users
  - Extensible
- Multiple user interfaces
- Staged development

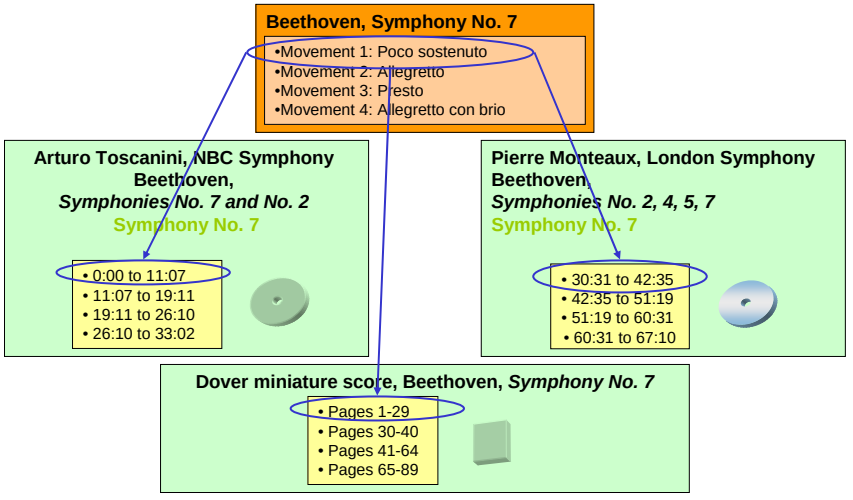
Variations2 Data Model: Example



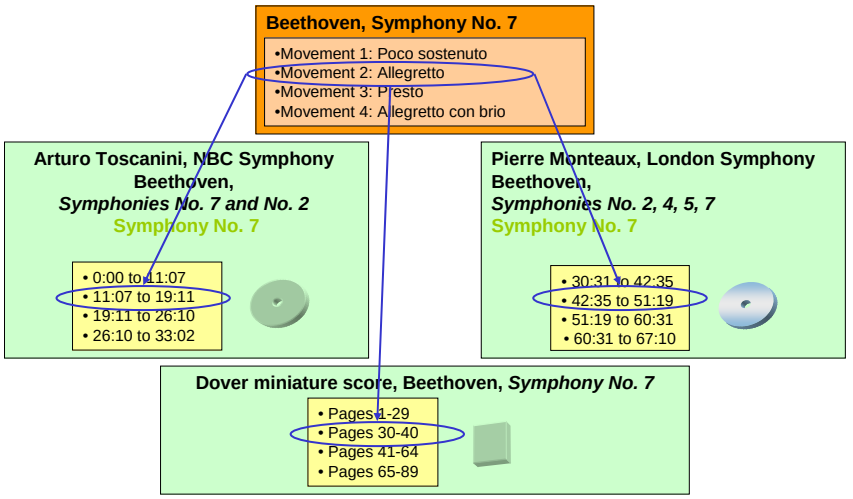
Work Structure: Example



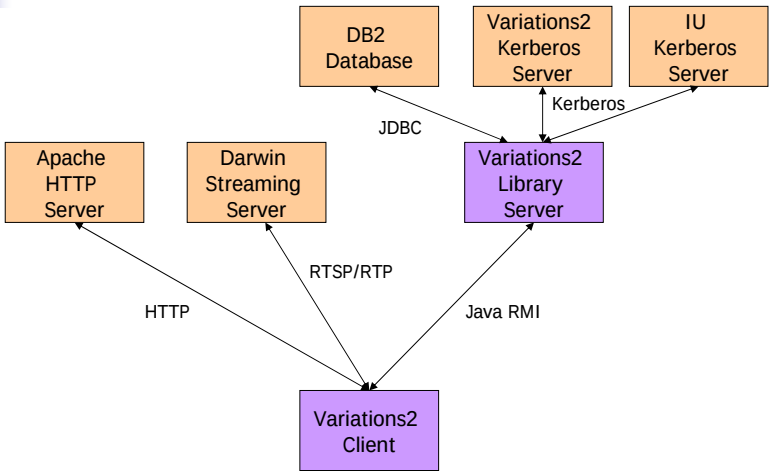
Work Structure: Example



Work Structure: Example



Variations2 1.0 Communications



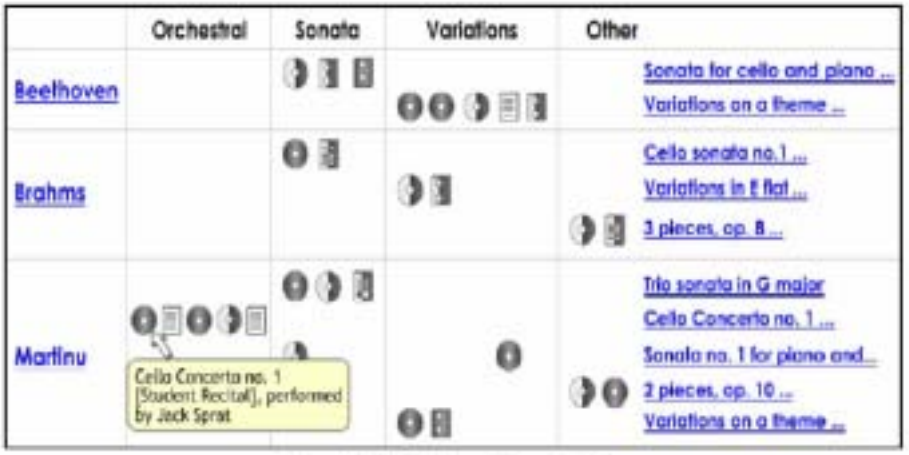


Figure 3. Visualization of Search Results

Figure 4. Work Window

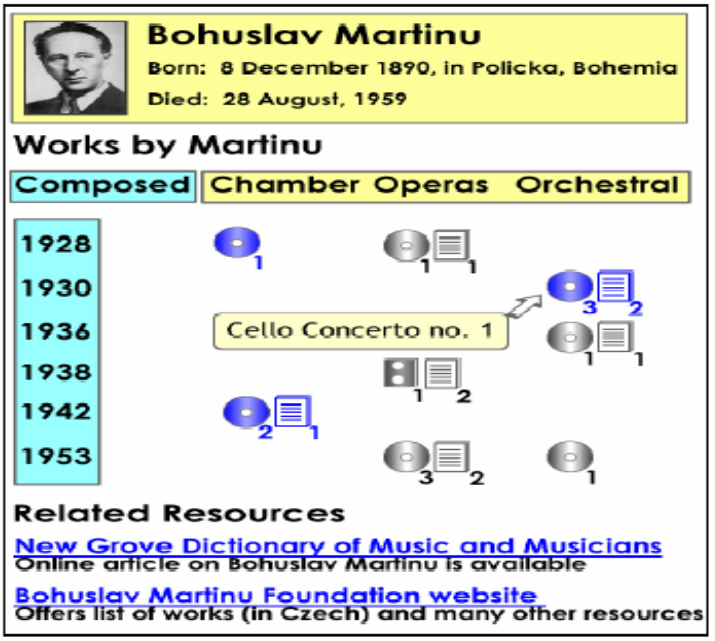
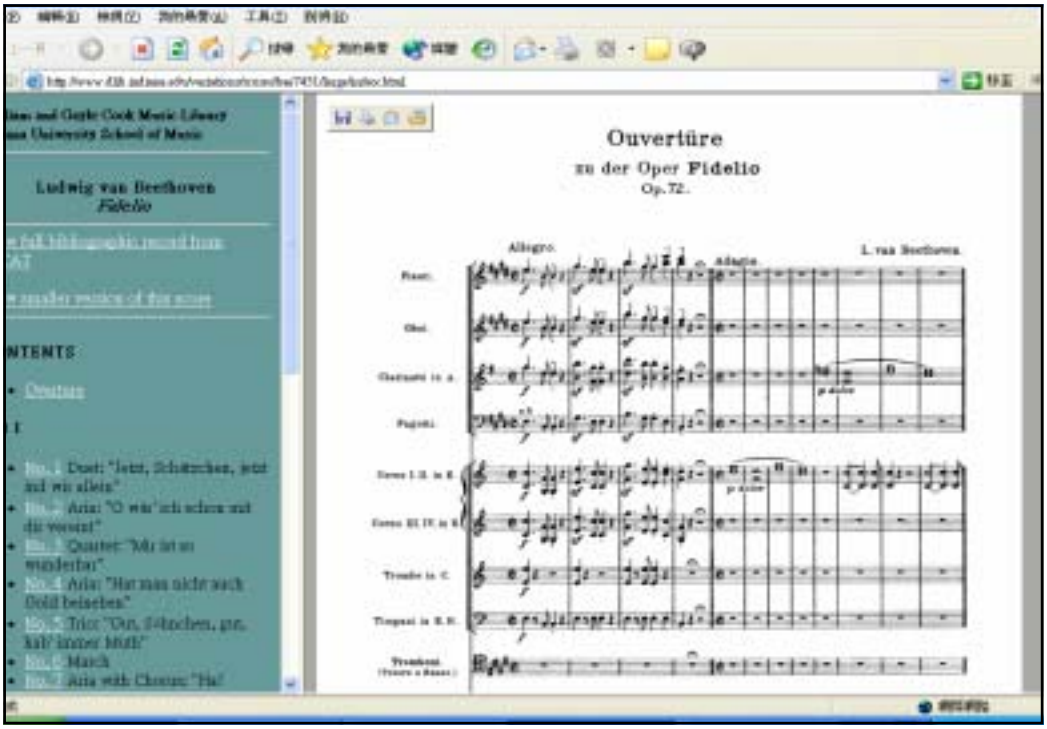
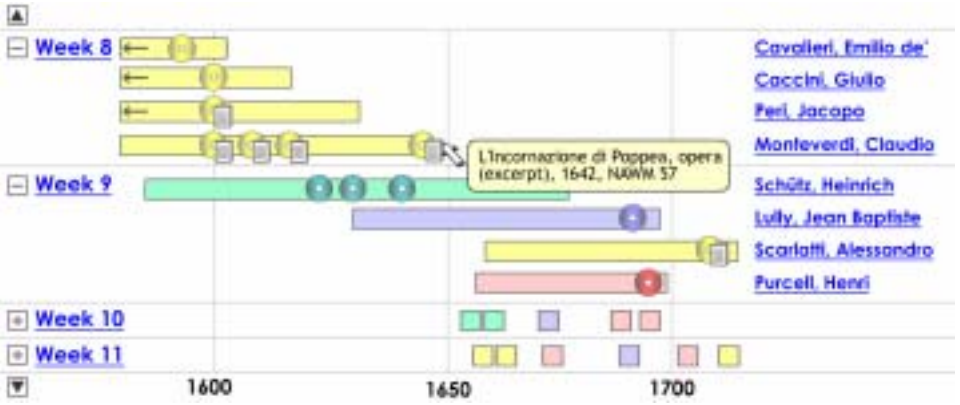


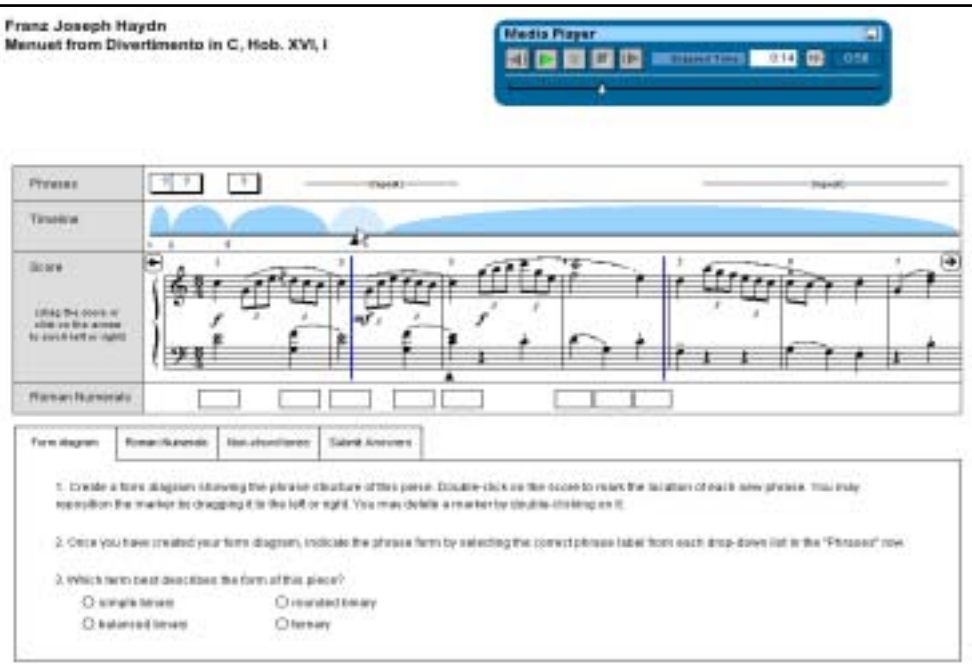
Figure 5. Composer Window

the digital library holdings provide a syllabus, either

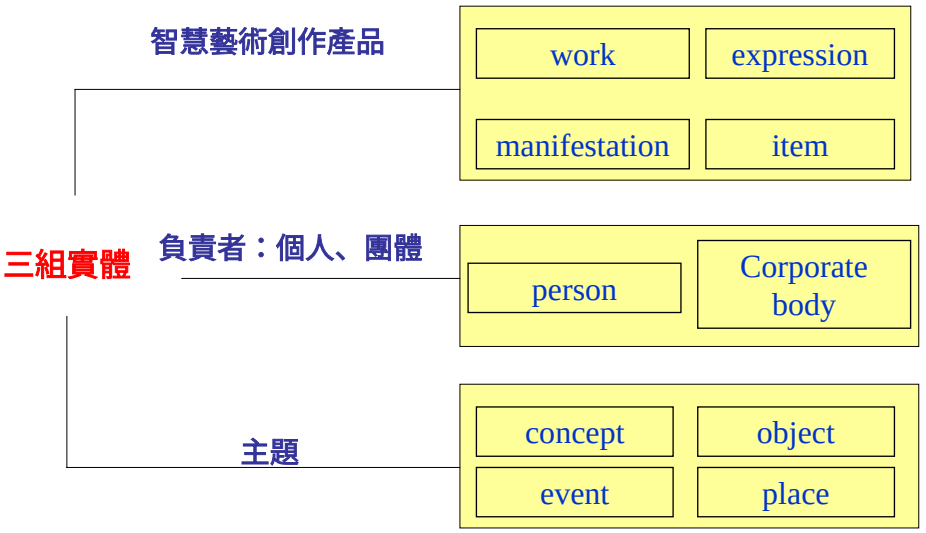


Visual Reserve List

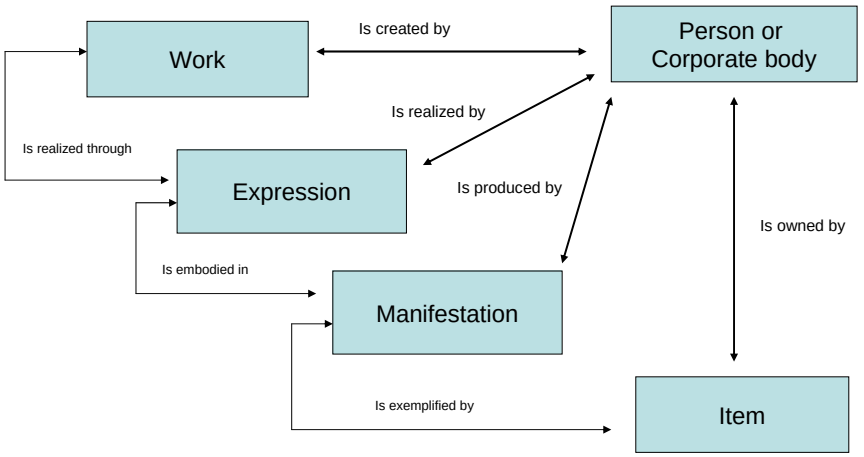




第一層架構—實體(Entities)表現圖



IFLA FRBR Entities



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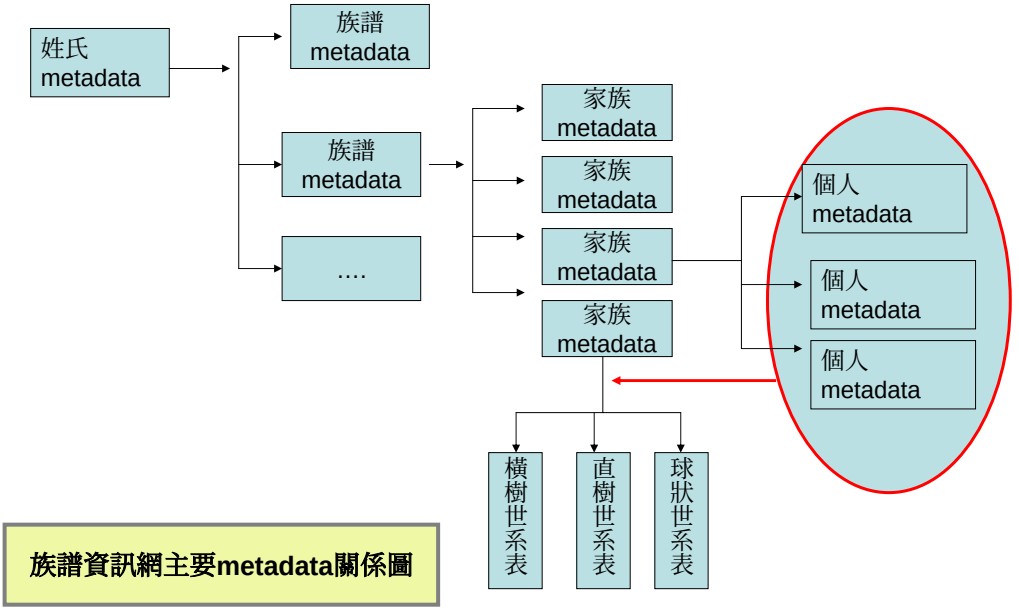
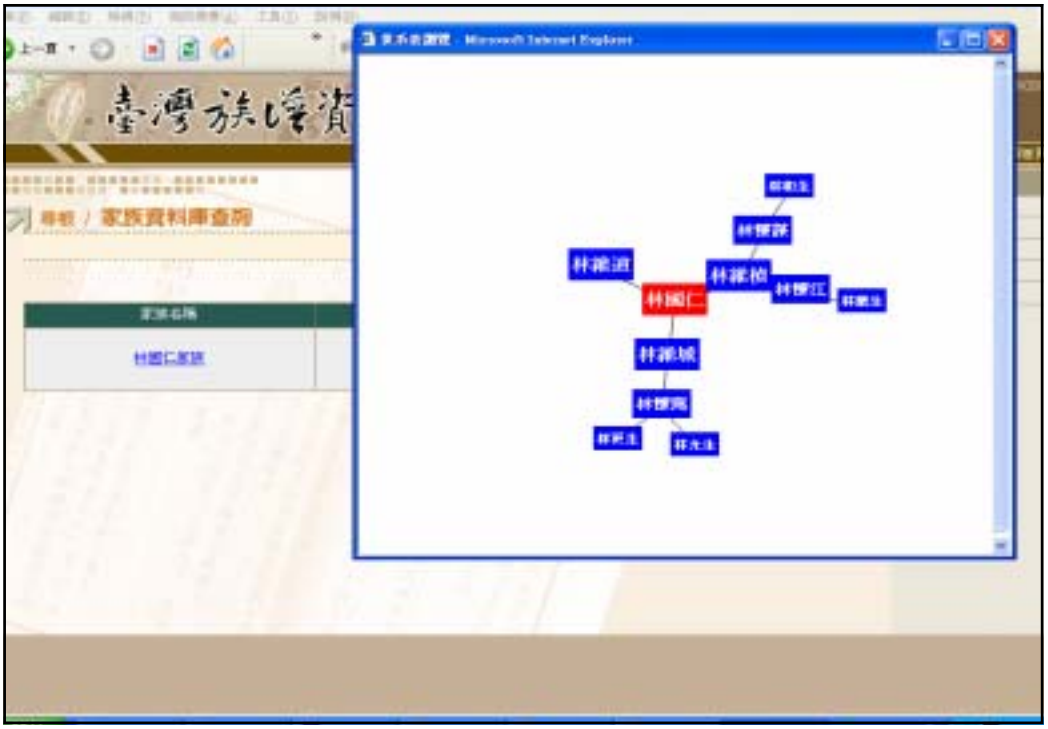


族譜資訊網主要metadata關係圖

臺灣族譜資訊網
border.gif - Microsoft Internet Explorer

臺灣族譜資訊網
人名資料庫查詢


臺灣族譜資
家族資料庫查詢
林國仁
林祿城

臺灣族
人名資料庫查詢
謝南
謝明經
謝南山

臺灣族譜資訊網
知名家族遷徙路線圖

臺灣族譜資訊網 家族遷徙圖 《廣東省鎮平開基祖 家族》

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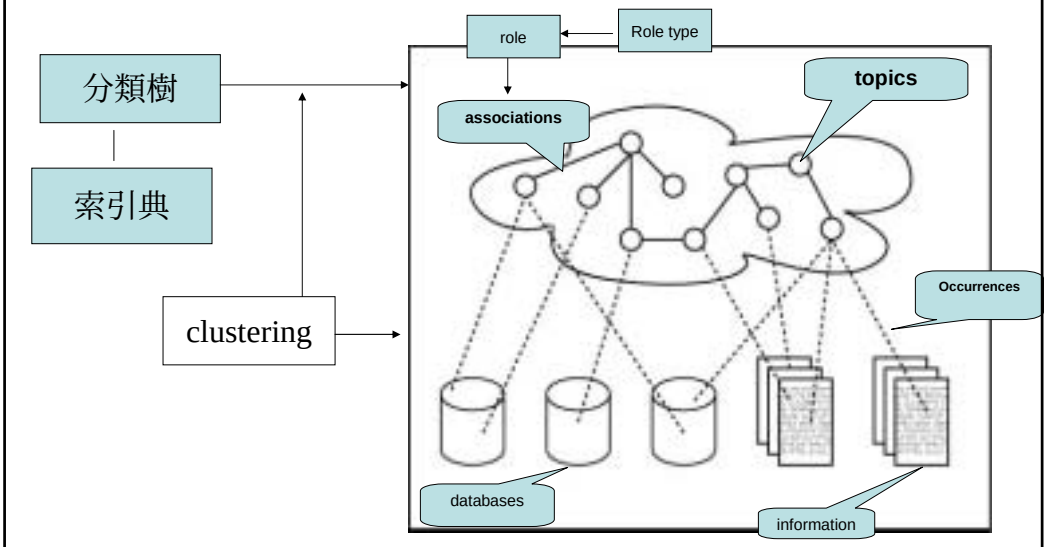
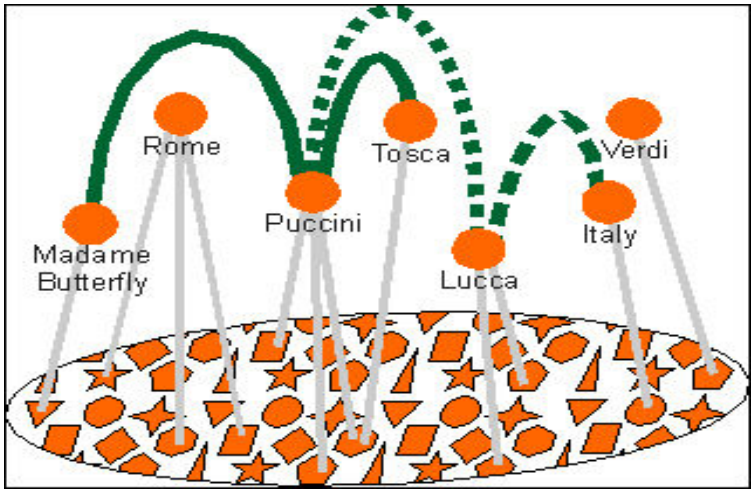
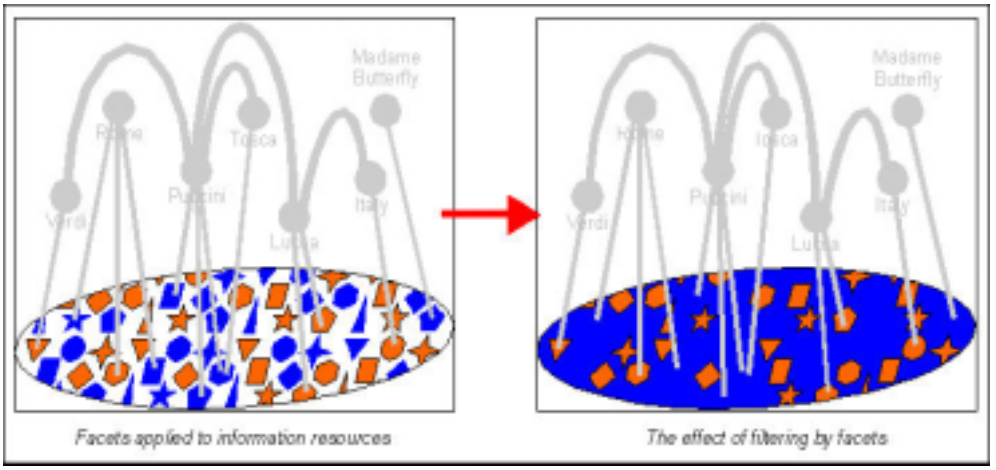


Topic maps 可做為 Portable semantic networks

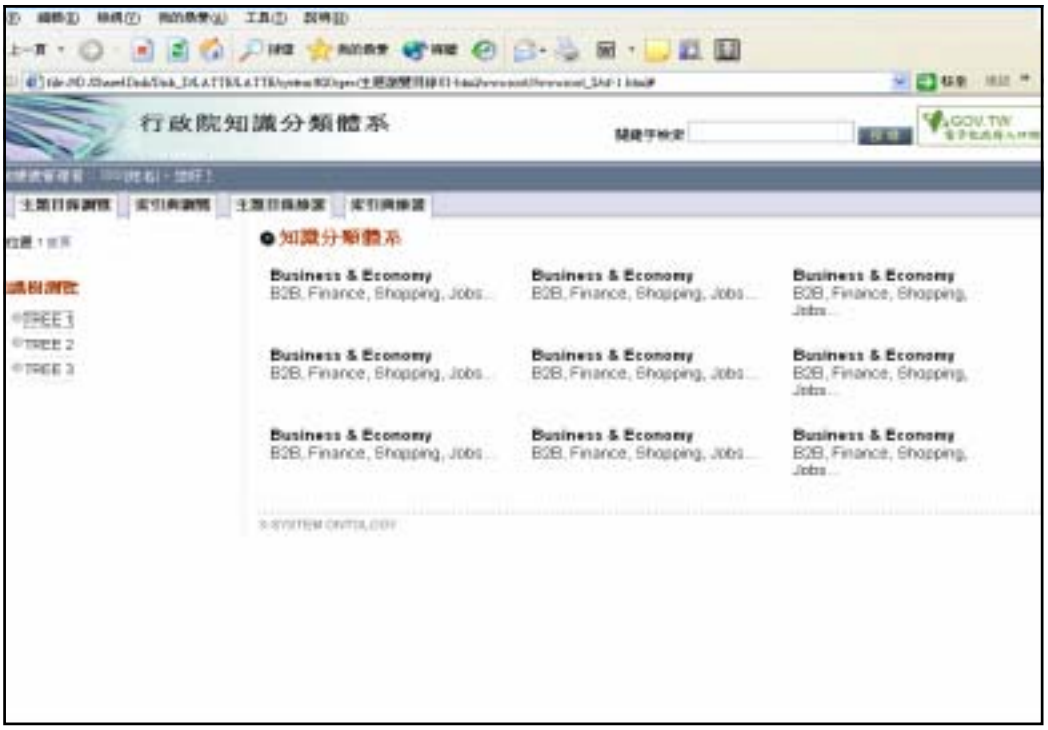


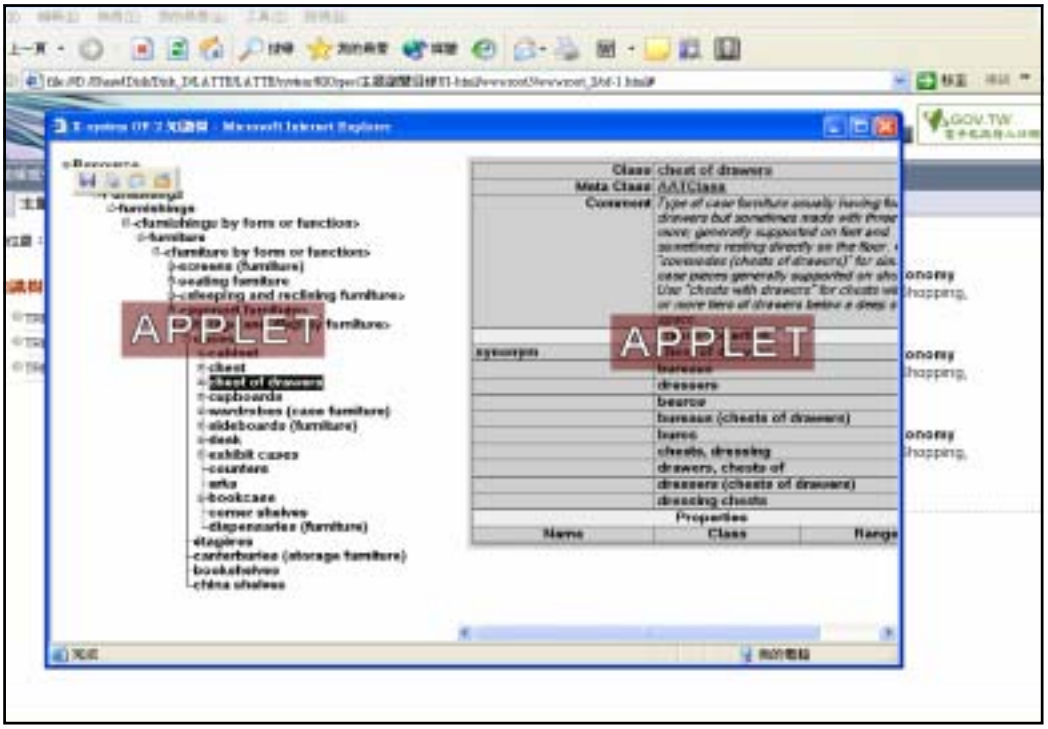
利用topic maps 做資訊過濾



利用topic maps建立網站資料的階層式分群(Hierarchical Clustering)

- 資料之間有從屬關係
- 形成樹狀結構


行政院知識分類體系
知識分類體系
Business & Economy
B2B, Finance, Shopping, Jobs...


APPLET
APPLET
Class chest of drawers
Meta Class AAIClass
Comment
dressers
bureaux
bureaux (chests of drawers)
chests, dressing
drawers, chests of
dressers (chests of drawers)
dressing chests
Properties
Name
Class
Range

The Library Landscape

- The Social Landscape
- The Technology Landscape

Source; The landscape, OCLC

The Social Landscape

- Staffing
- New roles
- Accommodating users
- Traditional versus nontraditional content
- Preservation and persistence
- Funding and accountability
- collaboration

Staffing: key points interviewed by OCLC

- 很多年長者要退休，新進者必需熟知 e-material and virtual services
- 我們需要組織免費的網路資源嗎
- 要讓年長的館員徵集未出版的資料，相當困難
- 圖書館員需重新分配工作，處理digital scholarship, open-source projects等事務
- 有很多館長並非圖書館專業
- 年輕的館員希望設計的系統是meet users where they are
- 圖書館員無冒險精神
- 並無繼續教育
- We’re well aware of trends and issues但是很多館員並不想改變現狀

Anatomy of a Gen X librarian: "Energized and excited"

Profile:

Female, age 28

Librarian, Communications Studies

Education:

B.A. History—University of Idaho,
MLIS University of Washington

Learning style:

Learns by doing, not by "seat" learning

Favorite pastimes:

Antiquing

Reading

Staffing

- Collectively, we feel we need to do everything ourselves – we need to get over this
- Working collaboratively with people to make things happen

New roles: key points interviewed by OCLC

- The library should serve as a community/civic center
- 公共圖書館應匯集社區資訊並與其他地方性組織合作
- Retail expectations
- Access is a form of sustainability
- 館藏發展難在new formats and delivery mechanisms
- 由於讀者自web 上　self-service，圖書館典藏使用降低，一般民眾使用之資料, 大量降低其傳統通路- 如圖書館
- 圖書館應該成為其他社群之資訊管理資源
- 圖書館應與更多元的機構一起工作
- 圖書館要積極推動e-learning, 而非成為他人的partner

Accommodating users

- 避免由圖書館員的角度看事情，應由讀者的角度看事情
- 使用者不太在意資料是web pages, a book or a serial
- Personalization and categorization 真的很重要
- 圖書館員低估使用者查尋　web的能力
- 使用者在圖書館中satisfaction with self-service的比例很高
- 圖書館員不可能change user behavior
- 對使用者而言，”方便”　非常重要

Traditional versus nontraditional content

- Collection-centric is old-fashioned, context is the king
- Context means adding intellectual value to content
- 以POD方式買書應較為便宜
- We need a way to bring together all content on a topic, not just what's in the catalog
- 圖書館應將一般已出版書的館藏留給Amazons
- 圖書館的特藏應該liberated and desegregated

Preservation and persistence

- 數位保存是國家層次的問題
- 目前的目錄無法建立主題性的瀏覽方式
- 數位化的目的在流通而非典藏

Funding and accountability

- 技術不是問題，經費才是
- 圖書館對內容的價格有不實際的期望 –因為他們對出版經濟不了解
- 數位內容對經費控制一點幫助都沒有
- 我們需要更有彈性的數位內容電子商務模式

collaboration

The Technology Landscape

- An increasingly interconnected environment
- Network services and architecture
- New standards
- Universal access to information

An increasingly interconnected environment

- 為何環境有越來越多的連結需求
  - 數位時代圖書館需有更多的系統支援
  - 聯盟的成立及其他的合作計畫迫使系統需連結
  - 需與非圖書館單位連結，如校園入口網站或教學系統
  - 跨應用系統的單一授權服務

An increasingly interconnected environment

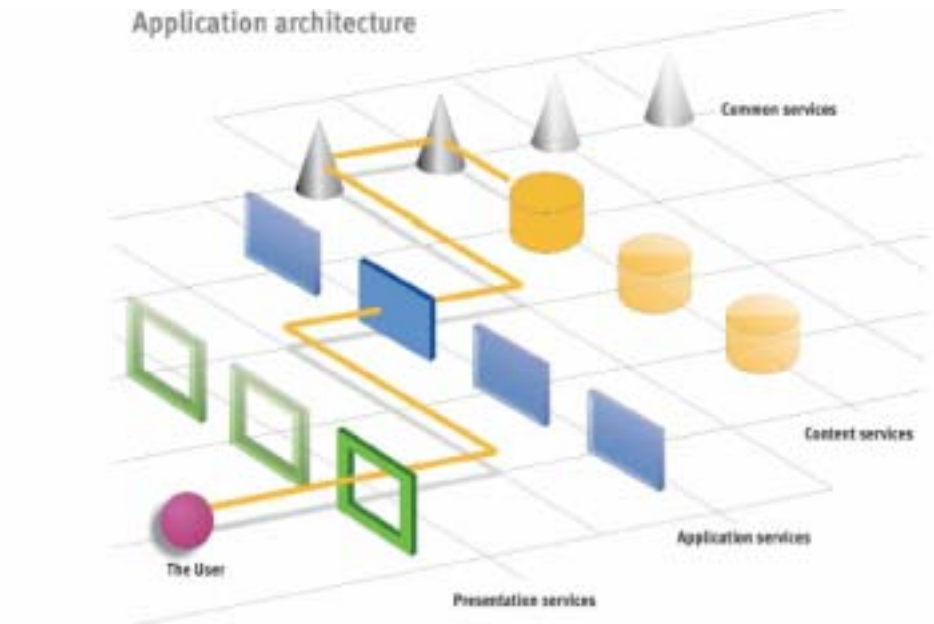
- System support
  - Library management system
  - Digital object management system
  - Portal or metasearch system
  - Resolver/Linker
  - ILL/resource sharing system
- Growth of formalized sharing
- Interconnecting and interoperability

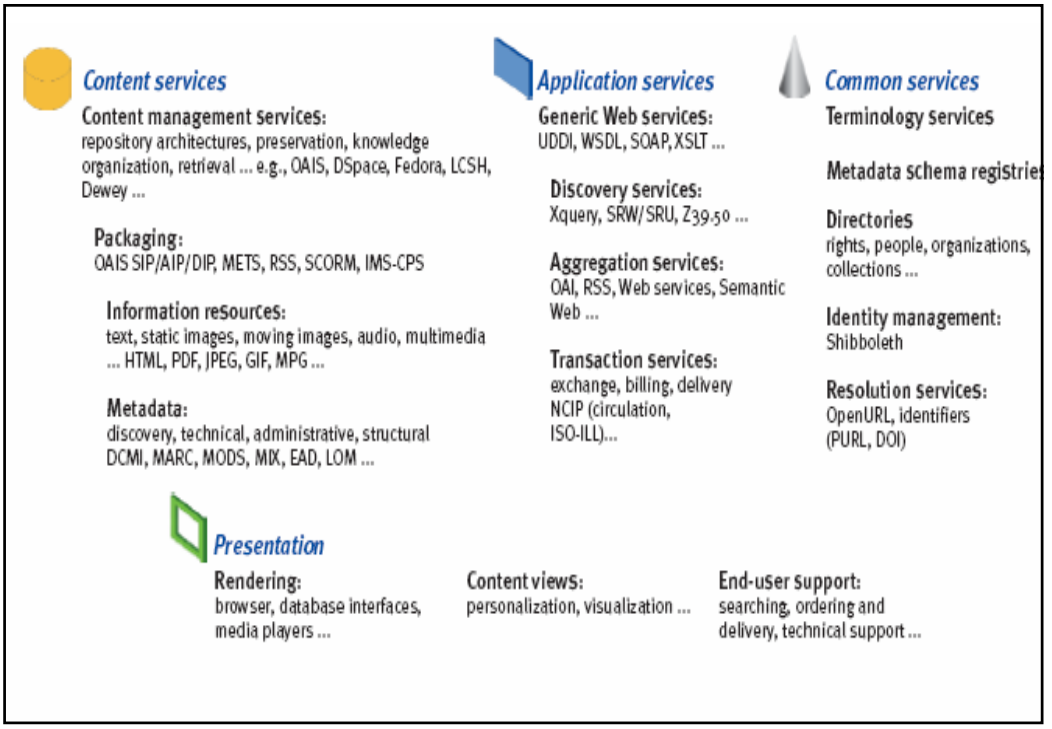
The Technology Landscape

- An increasingly interconnected environment
- Network services and architecture
- New standards
- Universal access to information

Network services and architecture

- Presentation services
- Application
- Content services
- Common services





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- Universal access to information

New standards

- Repository and content standards
  - OAIS
  - Preservation
  - Content packaging
  - Content exchange
  - Metadata
- Application
  - Cross searching: Z39.50
  - Harvesting: OAI
  - Resolution: OpenURL
  - Niche library transaction application: NCIP and ILL

The Technology Landscape

- An increasingly interconnected environment
- Network services and architecture
- New standards
- Universal access to information

Universal access to information

- Semantic web
- Web services
- Grid computing
- Wireless technology

資訊時代編目員面臨的衝擊

- 我們不是唯一做資訊組織的人
- Metadata格式多元，MARC只是其中的一種
- 過去的資訊組織方法無法滿足主題瀏覽的需求
- 彈性的主題知識體系的呈現
- 更視覺化的目錄介面
- 有太多新科技、新標準需要澈底了解及實作
- 我們需要重新考慮圖書館的經營型態，當然包括分類編目模式